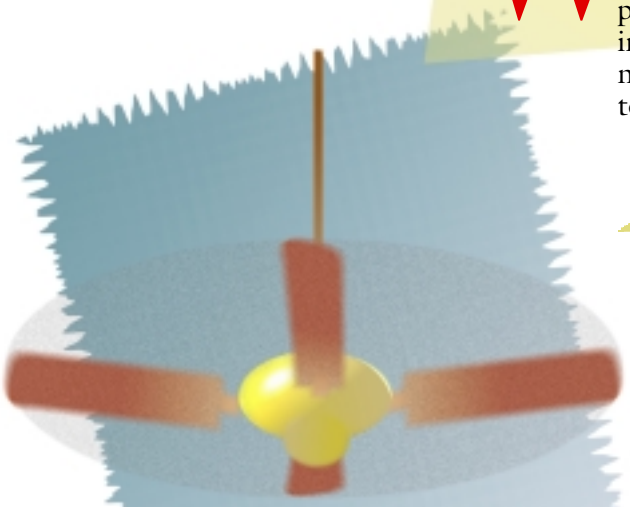
Keeping Your Cool with Ceiling and Whole House Fans

Do summer utility bills make you hot under the collar? If so, ceiling fans and whole house fans can provide the relief you're looking for.

Whole house and ceiling fans are experiencing a new popularity in the face of today's rising energy costs. Used in conjunction with modern air conditioning, they offer a new tradition of combining both old and new technology to keep your family comfortable and your energy bills low.



Ceiling Fans...

...create enough air movement in a room to make it feel cooler by four degrees or more!

Here are a few other things you should know about ceiling fans:

- They can be effectively used alone or along with your air conditioner. When used in combination, set your thermostat at a higher than normal setting to save on your energy costs.
- They're economical! An average ceiling fan uses about the same electricity as a 100-watt light bulb, so you can run one for just pennies a day. When used in place of your air conditioner, the savings are substantial.
- The blades need to be a minimum of seven feet from the floor, although manufacturers recommend you install your fan eight to nine feet above the floor for the most effective cooling.
- Running your ceiling fan day and night, whether you're home or not, might sound like a good way of keeping the temperature down inside your home. But running the fan when you're not in the room, or when you're away from home, does little more than drive up your energy costs. It's important to remember that the only thing the ceiling fan does is circulate air. It's not cooling the room—it's simply blowing air across your body and making you feel cooler, like a breeze on a hot summer day.
- Just as the flowing air can cool you in the summertime, it can chill you in the winter. So think twice about running fans when the outside temperature drops.

Ceiling and whole house fans are inexpensive to operate and install, and they can provide a substantial savings on your utility bills.

Question:

Which way should ceiling fan blades turn during the summer?

Answer:

If you look close at your ceiling fan, you'll notice that the blades are tilted. During summertime operation, the high edge of the blade should go forward first, which forces air downward so it can cool the room's occupants. The easiest way to tell if the blades are going in the right direction is to turn the fan on high and stand under it. If you feel the air blowing down on you, it's operating perfectly.

Whole House Fans ...

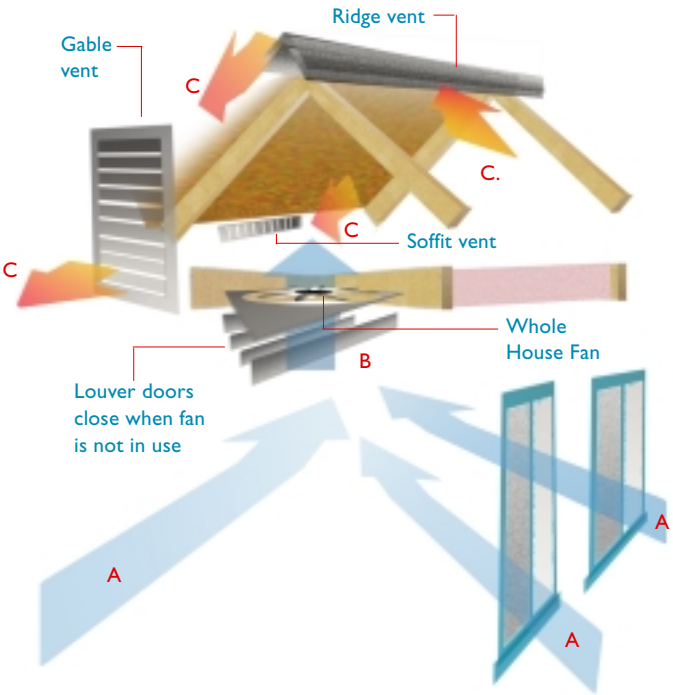
...are an economical, quick and efficient way to remove hot air that accumulates in your home during the day, when heat builds up in the walls and ceiling, and attic temperatures can rise to over 150 degrees. Even with a well-insulated ceiling, heat can seep from your attic into your home. A whole house fan, however, can help keep your home much more comfortable, simply by drawing cooler outside air in through your open windows and forcing hot air into the attic and out through the roof vents.

HOW A WHOLE HOUSE FAN WORKS:

A. Cool air is drawn in through open windows and doors.

B. The hot air from the house is pulled up into the attic by the whole house fan.

C. The positive air pressure causes the hot air from the house and attic to be exhausted outside through the attic vents.



In the early morning and after sundown, when the outside temperature drops below 80 degrees F, turn off your air conditioner and turn on your whole house fan. Your entire house is then cooled by fresh air, and your air conditioner gets some time off. This will reduce your cooling costs because the fan uses far less energy than the air conditioner. In fact, a typical whole house fan uses about one-tenth of the electricity that a comparably sized air conditioner uses.

Whole house fans are very powerful and need sufficient attic ventilation to be effective. Your contractor can help you determine the correct fan size, capacity, and number of attic vents needed for your home.

Whole house fans may be installed in a number of locations, but the most frequently used place is the hallway ceiling. For the fan to function properly, do not run your air conditioner at the same time, and *keep most of your windows open*. Keeping your windows open not only helps with the air circulation, but it also prevents fumes or flames from your gas appliances from being drawn back into your home. To find out more about combustion appliance safety, talk to your contractor or local utility company.

For more information

contact the

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www.energy.ca.gov/efficiency

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